

## **REMARKS**

### **Status**

This Amendment is responsive to the Office Action dated February 7, 2005, in which Claims 1, 2, 9-13, and 16-20 were rejected and Claims 3-8, 14, and 15 are objected to.

Claims 10-13 and 16-20 have been canceled; Claims 1, 3, 9, 14, and 15 have been amended; and no new claims have been added. Accordingly, Claims 1-9 and 14-15 are pending in the application, and are presented for reconsideration and allowance.

### **Information Disclosure Statement**

The Office Action indicates that the Information Disclosure Statement (IDS) fails to comply with 37 CFR 1.98(a)(3).

A new IDS is being submitted on even date, and lists specific page numbers for the non-patent literature publications. This new IDS is believed to comply with 37 CFR 1.98(a)(3).

### **Claim Objections**

Claim 1 stands objected to. As amended, Claim 1 is believed to overcome this objection.

### **Allowable Subject Matter**

Claims 3-8, 14, and 15 stand objected to as being dependent on a rejected base claim, but would be allowable if rewritten in independent form.

Claims 3, 14, and 15 have been written as independent claims. Claims 4-8 are dependent on independent Claim 3. As rewritten, Claims 3-8, 14, and 15 are believed to be in condition for allowance.

### **Claim Rejection - 35 USC 103**

Claims 1, 2, 9, 10, 12, 13, and 16-20 stand rejected under 35 USC 103 as being unpatentable over US Patent No. 6,333,990 (*Yazici*) in view of the cited *Hamming* reference. As best understood, the rejection is that it would have been obvious to use *Hamming's* grid parameters to design the adaptive notch filter as used in *Yazici* to remove grid artifacts. While Claims 16-20 have been canceled, this rejection is respectfully traversed with regard to Claims 1, 2, 9, 10, 12, and 13.

The present invention as claimed in Claim 1 is not obvious from the cited references since the cited references do not teach or suggest claimed features of Claim 1.

More particularly, contrary to the Office Action's position, *Yazici* does not teach an adaptive notch filter. It is not inherent from *Yazici's* statements at Col 5, lines 41-56 that a notch filter is used by *Yazici* since a filter presumes calculation and application of a transfer function. Instead, *Yazici* transforms the image windows into a frequency domain (Col.5, lines 37-40); removes low frequency components (Col.5, lines, 57-61); and replaces grid artifact spectral component, considered to be of the largest magnitude among high frequencies, with one "that has a magnitude substantially equally to the average of adjacent spectral components" (Col.5, lines 62-65). As such, rather than an adaptive notch filter, *Yazici* uses another approach to manipulate the spectral components directly without the computation of a transfer function.

Further, the cited references do not make obvious Claim 1's claimed step of "designing a notch filter as a function of said grid frequency and attenuation level and incorporating a smoothing window and an edge and spike elimination function". Notch filters have a well known disadvantage of producing ringing artifacts. The present invention employs a smoothing window and edge and spike elimination function to reduce/eliminate any existing ringing artifact resulting from the use of the notch filter. Note that *Yazici* (starting at Col 6, starting at line 41) states that its ringing artifacts are caused "by dividing the x-ray image into windows", not from the use of a notch filter. Therefore, *Yazici* is not employing a notch filter, and employing such a designed notch filter incorporating a smoothing window and an edge and spike elimination function is

not obvious from the cited references, whether the references are taken alone or in combination.

For the reasons set forth above, Claim 1 is believed to be patentable in view of the cited references, whether taken alone or in combination.

Claims 2, 9, 10, 12, and 13 are dependent on Claim 1, and therefore include all the features thereof. For the reasons set forth above with regard to Claim 1, Claims 2, 9, 10, 12, and 13 are also believed to be patentable.

With specific regard to amended Claim 9, the claimed features are not obvious from the cited references, specifically, the features of calculating finite impulse response notch filter coefficients, wherein said finite impulse response notch filter coefficients calculating includes using a trigonometric trapezoid filter algorithm with Potter P310 smoothing window, and wherein said step of suppressing includes using a spike effect elimination function and an edge effect elimination function.

#### **Claim Rejection - 35 USC 103**

Claim 11 stands rejected under 35 USC 103(a) as being unpatentable over US Patent No. 6,333,990 (*Yazici*) in view of the cited *Hamming* reference and further in view of the cited *Potter* reference.

Claim 11 has been canceled, and its feature incorporated into amended Claim 9.

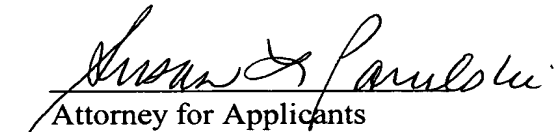
#### **Summary**

Should the Examiner consider that additional amendments are necessary to place the application in condition for allowance, the favor is requested of a telephone call to the undersigned counsel for the purpose of discussing such amendments.

For the reasons set forth above, it is believed that the application is in condition for allowance. Accordingly, reconsideration and favorable action are respectfully solicited.

The Commissioner is hereby authorized to charge any fees in connection with this communication to Eastman Kodak Company Deposit Account No. 05-0225.

Respectfully submitted,

  
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